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Amateur Radio

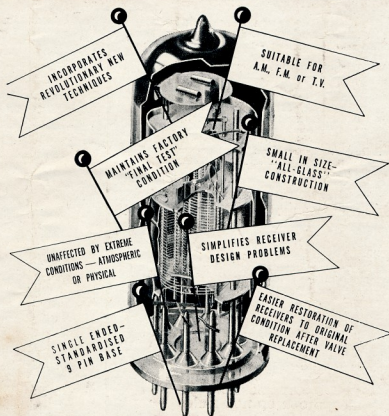
JOURNAL OF
THE WIRELESS
INSTITUTE OF
AUSTRALIA

For the Experimenter
and Radio Enthusiast



9D.

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Published by the Wireless Institute of Australia,
Law Court Chambers, 191 Queen Street,
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EDITORIAL**"Will The Suppression of Radio Interference Ever Come To Pass?"****EDITOR:**

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For years and years successive Governments have toyed with the problem of standardising the railway gauges throughout the Commonwealth with a view to firstly, the great economic value of such a scheme, and secondly—but of an infinitely greater importance—the immeasurable advantage to the defence requirements of our country. However, this vitally necessary change is still unaccomplished. Had it been carried out years ago the cost to the Commonwealth would have been vastly less than the astronomical figure envisaged today.

This may appear to bear little relationship to our interests, which are confined to the field of radio transmission and reception and electronics generally, until one recalls that we have a similar problem to face in the ever increasing "man-made radio interference."

Prior to World War II. the authorities were only interested in the problem insofar as it affected the broadcast listener and/or the commercial communications circuits. During the war the problem was brought to the front again with the great concern given to it by the Defence Services. But in spite of this, and in spite of the fact that great strides were made in the science of radio transmission and reception over these years, no major "attack" was made on the problem of interference of a man-made nature—and nothing has been done since!

With due respect, the Wireless Branch of the Postmaster-General's Department has rendered valuable service to the public and the Services in the elimination of interference problems insofar as the limitations of existing legislation will permit them, beyond which authority they cannot be expected to act.

Today the problem is becoming more and more urgent with the rapid expansion of the electronic art

encompassing highly specialised and sensitive high frequency equipment used both commercially and militarily, more sensitive domestic receivers, and—of great importance within the next few years—television. With the advent of television, will come interference problems hitherto unknown in this country and the responsible authorities are going to eventually face an irate public if steps are not taken now to eradicate man-made electrical interference.

But of paramount importance is the need for the elimination of such interference as part of our defence preparation because in time of war sites for defence installations cannot be chosen with a view to freedom from interference, but must be where circumstances may demand. The elimination of man-made interference may well prove to be a vital factor in defence should there be another world war, bearing in mind the knowledge we have of the sometimes unsurmountable interference communications had to contend with during the last war.

We say without fear of contradiction that present legislation is inadequate to deal with the problem and that the case demands immediate and courageous action by the Government. The problem must be attacked on the highest political level and the fact that the taxpayer will be involved insofar as he will have to bear the cost of the complete overhaul of the existing electrical undertakings should not deter legislators from initiating an immediate programme of action.

The time has arrived when we feel that nothing further will be achieved by increasing the pile of correspondence already on Government files—only concerted action by those vitally concerned with the elimination of this problem can give impetus to the required legislation.

—FEDERAL EXECUTIVE.

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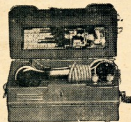
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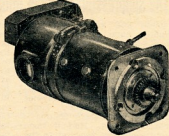


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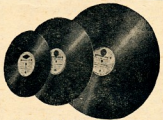
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"Radio and Hobbies" Car Radio Kit as described in May, 1949, issue. Homecrafts offer this kit complete to the last nut and bolt. Price, as illustrated, 22 Gns., including Sales Tax.

290 LONSDALE STREET, MELBOURNE

Central 4311

A System of Voice-Controlled Transmitter and Receiver Switching

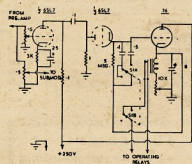
BY A. J. VERTIGAN,* VK3WR

For rapid break-in and ease of operation it was considered that voice operation of the transmitter and receiver switching would have advantages. Many methods of operation can be devised, but the one to be described can be installed in any relay operated rig without major alterations.

Firstly it is necessary to have relay control of the oscillator, r.f. stages, modulator and antenna change-over. The receiver must also be connected to the system as well. In this case the h.t. feed to the i.f. and r.f. stages is relay controlled. Immediately the transmitter goes off the receiver comes on without any time delay. These relays are, for normal operation, controlled by a switch on the receiver panel. For voice control, another relay, the contacts of which are parallel to the switch is used.

The output of a crystal microphone feeds a two-stage pre-amplifier, consisting of a 6F5 and a 6C5. From this pre-amplifier the output feeds normally to the sub-modulator. It also feeds into one side of a 6SL7 triode through a gain control, which in fact becomes a sensitivity control. The second section of the 6SL7 is connected as a diode and connects through the coupling condenser to the grid of the control tube, type 76. A one megohm resistor is

placed from the plate of the diode to ground to discharge the coupling condenser. The cathode of the control tube 76 has the relay operating coil and a 10,000 ohm variable bias resistor in series to ground and by-passed by an 8 uF. condenser.



The time constant components from the grid to the cathode of the 76 are most important. The resistor is 5 megs. A three position switch (S1A-B) is employed to switch the unit into operation and also to change the time constant condensers. The first position cuts the circuit through the relay contacts. The second position closes that circuit and switches the 0.1 uF. condenser across the

grid of the 76. The third position replaces the 0.1 uF. with a 0.5 uF. condenser.

With the 0.1 uF. condenser in use, the relay holds closed during normal sentences, but opens immediately speech ceases. With the 0.5 uF. condenser the time lag is much longer. The first position is useful for rapid break-in work, and where such rapid work is not required the second condenser can be used.

The relay used is a small job from disposals and operates on a current of about 3 Ma. (from squelch circuit of 522 receiver).

The adjustment of the equipment is as follows: Set the plate current of the 76 so that the relay contacts are open and an increase of about 1 Ma. will close them. Open the sensitivity control so that normal speech about three inches from the microphone will close the relay. It will be found that adjusting the 10,000 ohm bias resistor will vary the time constant slightly, and this can be set for best operation consistent with the above remarks.

This system has been in operation only a short time and has created a certain amount of interest. The full advantages of voice operated switching can only be realised when two stations are using it in QSO. So, what about it, chaps?

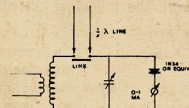
* 78 Queens Road, Melbourne, Victoria.

"THE MATCH-MAKER"

BY C. A. CULLINAN,* VK7XW

Calculators" for breakfast each morning instead of good old porridge.

Most Amateurs possess an absorption wavemeter, if not they can construct one quite easily, for this is the basis of the unit.



Reference to the circuit diagram shows that two terminals are placed in the tuned circuit and that a sensitive detector is included in the form of one of the crystal detectors and an 0.1 Ma. meter.

Operation of the device is simplicity itself. The terminals are shorted with a link, the wavemeter is coupled to the transmitter, which should be operating into a dummy load. Coupling can be either direct or via a link.

The wavemeter is accurately tuned to the transmitter with coupling adjusted to give a suitable deflection on the meter.

Next the section of line is attached to the wavemeter terminals, the link removed and the tuning of the wavemeter checked. Any variation in tuning shows that the line is not a quarter wave. If the line has originally been cut a bit on the long side it can now be easily pruned to the correct length.

Finality is reached when the tuning of the wavemeter is exactly the same with either the link or the line connected to the wavemeter.

The line must always be open at the far end as the principle of operation is based on the fact that a quarter wave line which is open-circuited at one end reflects a short circuit at the other end. Therefore if the line is exactly a quarter wave, it can take the place of the shorting link in the wavemeter tuned circuit without upsetting the tuning in the slightest. If you work carefully you will find that even a quarter of an inch snipped off the line will make a difference. So now you can go to it and check your quarter wave line sections easily and cheaply.

No, we are not running a matrimonial agency, so you can show this to the XYL without fear of being told to peel the spuds while she finds out how to marry off Matilda to that elusive Wilfred fellow.

In the design of many antenna systems it is necessary to use quarter wave lines and it frequently becomes difficult to know if a line cut to calculated length is really a quarter wave or a little bit either way. You may be going along quite OK until the Ham down the street starts getting better signal strength reports, then you become a "doubtful Thomas."

However, all is not lost, since this little "Match-Maker" will quickly enable you to adjust that doubtful line until it is a quarter wave, with an exactness that would please everyone except the blokes who have "Integral

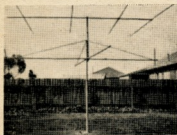
* 12 Montrose Place, Launceston, Tas.

Six Days A Week But Not On Washdays

During the last few months VK5KL's rotary clothes line, on which has been mounted a 50 Mc. four element beam, has become quite famous.

He moved into a new house and had the gear installed in the spare room and was all set to go except for an antenna.

At first a "Halo," loaned from VK5QR, was used, but hearing others working DX he decided to do something about it. The result is shown in the accompanying photograph.



Although only a few feet high, amazing results have been obtained, working VK2, 3, 4, 5, 6, 7 and ZL with only six watts input to the small transmitter—an 1852 and QQCO/15 combination harmonic oscillator and p.a.

What happens on wash days?

The 300 ohm line, where it feeds the "T" match, is tapped into the poly and dural rod. The bolts are unscrewed and the feed line folded out of the way until the washing is dry, then reconnected.

Yes the neighbors are amazed to see the beam whizzing around above the clothes.

The drilling of a hole, brazing of a nut to the bottom section of piping, and the use of a winged nut to lock the rotating section will suffice for some months until a shack and tower are erected.

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ADJUSTMENT OF V.H.F. CONVERTER R.F. STAGE

Where a 144 Mc. 6J6 push-pull r.f. amplifier is employed in a converter similar to that described by G21Q in "Short Wave Magazine," of July, 1950, and August, 1949, the grid dip oscillator may be used as follows for checking the neutralisation as well as for the purpose of checking the resonant frequency of the grid and plate circuits.

On coupling the g.d.o. to the r.f. amplifier grid coil it will most likely be found that two dips occur when tuning the g.d.o. over the range containing the 144 Mc. band. One dip may be more pronounced than the other. The weaker one is due to the effect of the plate tuned circuit reacting back via the unneutralised grid-plate capacity of the valve. The neutralising condensers should be adjusted until only the resonance dip of the grid circuit remains. The grid coil may now be adjusted to frequency, checking in the normal manner with the g.d.o., and also the plate circuit brought on to frequency with the plate trimmer.

Final checking can be made with the converter switched on, receiving a station near the middle of the band and peaking the circuits for maximum reading on a signal strength indicator on the main receiver.—VK3ABA.

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CR4	Cape Verde Islands	KC6	Caroline Islands	TA	Turkey	VS9	Aden and Socotra Is.
CR5	Guinea, Portuguese	KC6	Palau (Pelew) Isl.	TF	Iceland	VS9 (MP4)	Oman
CR6	Angola	KG4	Guantanamo	TG	Guatemala	VS9	Maldire Island
CR7	Mozambique	KG6	Marianas Islands (Guam)	TI	Cocos Island	VT1	Kuwait
CR8, Goa (Portuguese India)		KG6	Bonin and Volcano Islands (Iwo Jima)	TT	Costa Rica	VU	India
CR9	Macau	KH6	Hawaiian Islands	UA1	Franz Josef Land	VU4	Laccadive Islands
CR10	Timor, Portuguese	KJ6	Johnston Island	UA1, 3, 4, 6, 7	European	VU5	Andaman and Nicobar Islands
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DJ	Philippine Islands	KV4	Swan Island	UF6	Georgia	YI (MD6)	Iraq
EA	Spain	KW6	Samoa, American	UG6	Armenia	YJ	New Hebrides, British
EA6	Balearic Islands	KW6	Virgin Islands	UH8	Turkoman	YK	Syria
EA8	Canary Islands	KW6	Wake Islands	UI8	Uzbek	YN	Nicaragua
EA9	Rio de Oro	KZ5	Marshall Islands	UJ8	Tadzhik	YR	Roumania
EA9	Morocco Spanish	LA	Canal Zone	UK8	Kazakh	YS	Salvador
EI	Eire	LX	Norway	UM8	Kirghiz	YU	Jugoslavia
EK	Tangier Zone	LZ	Argentina	UN1	Karelo-Finnish Republic	YV	Venezuela
EL	Liberia	M1	Luxemburg	UO5	Moldavia	ZA	Albania
EP, EQ	Iran	M1	Bulgaria	UP2	Lithuania	ZB1	Malta
ET	Ethiopia	MB9 (OE)	San Marino	UQ2	Latvia	ZB2	Gibraltar
F	France	MC1 (MD1, MD2, MT2)	Austria	UR2	Estonia	ZC1	Transjordan
F8	Algeria	MD1 (MC1, MD2, MT2)	Libya	VE	Canada	ZC2	Cocos (Keeling) Is.
F8	Madagascar	MD2 (MC1, MD1, MT2)	Libya	VK	Australia	ZC4 (MD7)	Christmas Island
F8	Kerguelen Islands	MD3 (MI6)	Eritrea	VK1	Heard Island	ZD1	Cyprus
F8	New Amsterdam Is.	MD4 (MS4)	Somaland	VK1	Macquarie Island	ZD2	Palestine, Arab
F8	Cormoro Island	MD5 (SU)	Italy	VK9	New Guinea, Territory of	ZD3	Sierre Leone
FC	Corsica	MD6 (YI)	Egypt	VK9	Norfolk Island	ZD4	Nigeria
FD8	Togoland, French	MD7 (ZC4)	Cyprus	VO	Papua Territory	ZD6	Gambia
F8	Cameroon, French	MF2 (AG2, IT)	Trieste	V0	Newfoundland	ZD7	Togoland
F8	French West Africa	MI6 (MD3)	Eritrea	V1	Labrador	ZD7	St. Helena
FG6	Guadeloupe	MP4 (VS9)	Oman	V2	Honduras, British	ZD8	Ascension Island
F18	French Indo-China	MP4	Bahrain Island	VP2	Leeward Islands	ZD9	Tristan da Cunha and Gough Islands
FK8	New Caledonia	MS4 (MD4)	Somaland	VP3	Windward Islands	ZE	Rhodesia, Southern
FL8 (MD4)	Somaland	OA	Peru	VP4	Guiana, British	ZK1	Cook Island
FMS	French India	OE (MB9)	Austria	VP4	Trinidad and Tobago	ZK2	Niue
FN	French Oceania (e.g. Tahiti)	OH	Finland	VP5	Cayman Islands	ZL	New Zealand
F08	Clipperton Island	OK	Czechoslovakia	VP6	Jamaica	ZM	Samoa, Western
FF8	Miquelon and St. Pierre Islands	ON	Belgium	VP6	Turks and Caicos Is.	ZP	Paraguay
FQ8, French Equator. Africa		OQ	Belgian Congo	VP7	Barbados	ZS	Union of South Africa
FR8	Reunion Island	OX	Greenland	VP8	Bahama Islands	ZS2	Marion Island (Prince Edward Island)
FT4 (3V8)	Tunisia	OP	Faeroes, The	VP8	Falkland Islands	ZS3	Southwest Africa
FU8	New Hebrides, French	OZ	Denmark	VQ1	South Georgia	ZS7	Swaziland
FY8	Guiana, French, and Inini	PA	Netherlands	VQ2	South Orkney Islands	ZS8	Basutoland
G	England	PJ, Netherlands West Indies		VQ3	South Sandwich Is.	ZS9	Bechuanaland
GC	Channel Islands	PK	Java	VQ4	South Shetland Is.	3A2	Menaco
GD	Isle of Man	PK4	Sumatra	VQ5	Bermuda Islands	3V8 (FT4)	Tunisia
GI	Ireland, Northern	PK5	Borneo, Netherlands	VQ6	Zanzibar	4X4	Israel
GM	Scotland	PK6	Celebes and Molucca Islands	VQ8	Rhodesia, Northern	9S4	Saarland
GW	Wales	PK7	New Guinea, Netherlands	VQ8	Tanganyika Territory		Countries With No Allotted Prefixes
HA	Hungary			VQ8	Kenya		Aldabra Islands
HB	Switzerland			VQ8	Uganda		Antarctica
HC	Ecuador			VQ8	Somaland, British		Bhutan
HC8	Galapagos			VQ8	Chagos Islands		Easter Island
HE1	Liechtenstein			VQ8	Mauritius		Guinea, Spanish
HH	Haiti			VQ8	Seychelles		Infni
HI	Dominican Republic			VR1	Gilbert, Ellice, and Ocean Islands		Jan Mayen Island
HK	Colombia			VR2	Fiji Islands		Principe and Sao Thome Is.
HL	Korea			VR3	Fanning Island (Christmas Island)		Tokelau (Union) Islands
HP	Panama						Wrangel Islands
HR	Honduras						Yemen
HS	Siam						

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AMATEUR CALL SIGNS

ADDITIONS, ALTERATIONS AND DELETIONS
FOR MONTH OF APRIL, 1951

ADDITIONS
New South Wales
2MZ—W. Cromie, 103 Oyster Bay Rd., Oyster Bay.

2ABP—R. G. Dunford, John St., Coonabarabran.
2AIR—A. J. Smith, 19 Blenheim St., Enfield.
2ALE—M. Stroehfeld, c/o E. M. Alcock, Fern-
side, Adelaide.
2ANI—D. H. Lee, Turriel Point Rd., Dolans Bay.
2ANY—J. M. Harrison, 1 Flat, 17 Merlin St.,
North Sydney.
2AOQ—D. F. Lloyd, 99 Grant St., Bondi
Junction.
2APE—N. R. Watkins, 71 Stirling St., Dubbo.
2APY—M. C. W. Ridd, 137 High St., Nth. Sydney.

Victoria
3RF—R. F. Miller, Bula Bula.
3ACX—D. H. Davis, 926 Station St., Box Hill.
4AD—D. Clarke, 14 Mile End Rd., Carnegie.
3AFD—S. K. Weaver, 2 Riverview Rd., Essendon.
3AMI—M. Akram (Cpl.), R.A.A.F. Station, Bal-
larat.
3AQO—R. W. Gibb, "The Orchard," Robina-
warrah, via Wangaratta.
3AXD—C. C. Burrows, Deschamps Ave., Lilydale.

Queensland
4FK—V. F. Kennen, on board vessel "Quest,"
private address: Allen St., Hamilton.
4HV—H. Vaase, 50 Mitchell St., North Ward,
Townsville.
4LF—J. R. Lewis, Orchid St., Enoggera, Brisbane.
4NQ—N. S. Piermont, c/o. Station 4GL, Long-
wood.
4OR—K. J. L. Langsdorf, Nobby.
4XL—J. T. Hope, Royal Parade, St. John's
Wood, Ashgrove, Brisbane.

South Australia
5CN—A. W. H. Wright, Signals Section, R.A.A.F.
Station, Darwin, N.T.
5DE—D. E. Sidler, Governor McDonald Hotel,
Salisbury.
5DP—R. E. Fodman, 4 Bernard St., Lower
Mitcham.
5FO—H. E. Vivian, 68 Livingstone Ave., Prospect.
5GA—A. Dele University Radio Club, University
of Adelaide, Adelaide.
5VG—D. P. Gooding, 379 Henley Beach Rd.,
Lockleys, Adelaide.

Western Australia
5HK—D. E. Graham, 110 Edinboro St., Mount
Hawthorn.
6UF—F. H. Turner, 74 Chelmsford Rd., Mt.
Lawley.

Territories
9FK—R. C. Fawkes, Konedobu, Port Moresby,
T.N.G.

ALTERATIONS
New South Wales
2FH—Flat 6, "Wirraway," Fairlight Cres., Manly.
2IE—32 Rankin St., Bathurst.
2JD—"Blue Vista," Elizabeth Cres., Newport.
2RP—Lot 3, Pittwater Rd., North Ryde.
2XD—28 Bellevue Ave., West Ryde.
2AIW—3 Woodville Avenue, Kingsgrove.
2AKK—27 Cecil Street, Ryde.
2AND—78 Bridge Street, Lane Cove.

Victoria
3CW—27 Bath Street, Chelsea.
3GL—171 Bay Street, Port Melbourne.
3GM—Parson Place, Glen Iris, S.E.6.
3MH—1122 Lydiard Street North, Ballarat.
3PK—38 Alamein Street, Arnaud.
3TA—Naticum Road, Horsham.
3TV—"Allandale House," Warrigal Rd., Holmes-
by-leigh, via Ashburton.
3TY—31 Victoria Street, Warrnambool.
3TZ—213 Bluff Road, Sandringham.
3VX—10 Maude Street, Carnegie.
3W—22 Wilford Street, Glenroy.
3AJZ—1 Henry Street, Box Hill.
3AMC—42 Normanby Road, East Kew.
3AMP—1 Dundas Street, St. Arnaud.
3ANP—Green Street, Carisbrook.
3ARN—R.A.A.F. Station, Ballarat.
3ATA—"Portable," Naticum Rd., Horsham.

Queensland
4AD—Radio Station 4QL, Longreach.
4GM—M.V. "Melbidge," c/o. Department of
Native Affairs, Thursday Island.

South Australia
5KW—Worman Street, Berri.
5RY—12 Dunn Street, Semaphore.
5SL—6 Marshall Street, Berri.
5XK—233 Henley Beach Rd., Torrensview.

Western Australia
6AR—c/o. Department of Civil Aviation, Kal-
barri.
6PC—Broadcasting Station 6NA, Narrogin.
6GA—c/o. Department of Civil Aviation, Forrest.
6K—Karridale.
6WG—9 Victoria Street, Albany.

DELETIONS
New South Wales
2LK—Cancelled.
2EG—Cancelled.
2LA—Cancelled.
2LR—Cancelled.
2NQ—Cancelled.
2VK—Cancelled.
2ABE—Cancelled.
2ACK—Cancelled.
2ACQ—Cancelled.
2ADD—Cancelled. Now operating under 3ACX.
2AFH—Cancelled.
2AFV—Cancelled. Now operating under VKABE.
2AGG—Cancelled.
2AMY—Cancelled. Now operating under 5DE.
2ARX—Cancelled.
2ARO—Cancelled.
2ASA—Cancelled.
2AVO—Cancelled. Now operating under VK5DJ.

Victoria
3DL—Cancelled.
3EN—Cancelled.
3ET—Cancelled.
3FV—Cancelled. Now operating under 9FK.
3LI—Cancelled.
3NV—Cancelled.
3OI—Cancelled.
3UF—Cancelled.
3AKZ—Cancelled. Call Sign reserved two years
from 1/4/51.
3ALZ—Cancelled. Now operating under 3RF.
3AZN—Cancelled.

Queensland
4ER—Cancelled.
4FS—Cancelled.
4MS—Cancelled.
4OW—Cancelled.
4TU—Cancelled. Now operating under 5CN.
4UJ—Cancelled.
4VM—Cancelled. Now operating under 2ALE.
4ZD—Cancelled.

South Australia
5CF—Cancelled.
5HA—Cancelled.
5JR—Cancelled.
5LL—Cancelled.

Western Australia
6HL—Cancelled.
6AJ—Cancelled. Now operating under VK3AJB.
6KH—Cancelled. Now operating under VK2WO.

Tasmania
7FF—Cancelled. Now operating under VK3ABV.
Territories
1HV—Cancelled. Now operating under 4HV.
1JC—Cancelled. Now operating under VK2YG.
1BY—Cancelled. Now operating under 2ANI.
1BT—Cancelled. Now operating under 2M2.
1NY—Cancelled. Now operating under 2ANI.
1VX—Cancelled. Now operating under 2APY.

AMENDED ADDRESS
In the April issue the address of VK3PL was
incorrect. The full details are: VK3PL—John
F. Isaac, 263 Bluff Road, Sandringham, Vic.
—

ABSTRACTS FROM OVERSEAS MAGAZINES

"SHORT WAVE MAGAZINE," FEBRUARY, 1951
Page 790: "Crystal Controlled V.H.F. Con-
verter." A two metre converter. Circuit: 2
stages using a 12AT7 as r.f./mixer and another
12AT7 as l.o./osc., the crystal used is 7500 Kc.
excited at 22.5 Mc. Input arranged for coupling
to a balanced 300 ohm feedline. Full description,
circuit and photographs.

Page 793: "Hersen Grid Keying Methods."—
Good practical discussion on various circuits
and values. Importance of obtaining complete
cut-off, control grid bias keying characteris-
tics all covered with relevant circuit diagrams.
Will be of considerable interest to the c.w. man.
Page 814: "Calibration Checks on Two Metres"
—Using the BC221 (Bendix) Wavemeter. Check
points provided by two strong beats at 3600
and 3625 Kc., with a weaker note at 3650 Kc.
corresponding to 144, 145 and 146 Mc. respec-
tively make excellent markers for the two
metre band. Full check point data given in
table form. Well worth noting.

"CQ," FEBRUARY, 1951
Page 17: "Radio Wave Propagation." Part 3.
—Concluding a three-part article giving the
authoritative low-down on why our high fre-
quencies act as they do. Well written and
illustrated. Offers suggestions as to how v.h.f.
tropospheric "band openings" may be predicted.
Page 24: "The Heterodyne." A tuneable audio
nulling amplifier for rejecting heterodynes.
Circuit of a heterodyne eliminator operating in
the audio frequency range which will be of
value for phone work. Tubes used: 6X4, 6XGT
and 6J5. External power supply required; 300
volts B plus and 6.3 heaters.
Page 31: "Up And At 'Em."—Encouraging
story of a simple vertical half-wave radiator.

"Whip" type of construction, thirty-three and
one-half feet in length. Full dope on methods
of loading (coils) and tuning. Results obtained
by author appear very satisfactory. Worth a
trial. Used in conjunction with a counterpoise
wire.

R.S.G.B. "BULLETIN," FEBRUARY, 1951
Page 286: "A Switched Wide-Band Exciter."
Part II.—Details the construction, practical
modification of the wide-band couplers and the
operating conditions to be selected. Well
illustrated with photographs and diagrams. Out-
put approximately 3 watts of r.f. on 3.5, 7, 14,
21 and 28 Mc. bands, the output voltage is
stated to be constant to within 10 per cent.
without tuning adjustments.

Page 291: "Combined Bias and Control Unit
For Break-In Operation."—Circuit described has
been extracted from the American AN/ART 13
Control System and adapted to provide (1) p.a.
bias, (2) relay keying of the b.a./d. stages of
Tx and (3) operation of the relays which re-
quire to be "held" during transmission. Tubes
one 6CS (control valve) and one 6X5 (bias
supply). Relays provide automatic change-over,
including receiver muting for break-in opera-
tion.

(Continued on Page 9)

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Remembrance Day Contest, 1951

The Remembrance Day Contest is an Australian annual contest to perpetuate the memory of those Australian Amateurs who gave their lives for their country during World War II. It is held on the week-end nearest to the 15th August in each year, the date on which hostilities ceased in the S.W.P.A.

A handsome Perpetual Trophy is awarded annually for competition between States, inscribed with the names of those who made the supreme sacrifice, and so perpetuating their memory throughout Amateur Radio in Australia. The name of the winning State each year is also inscribed on the Trophy.

RULES

1. The Contest will commence at 1800 hours E.A.S.T. on 11th August and continue through until 1730 hours on the 12th August. The period of operation of any station is limited to any twelve consecutive hours within the 24 hours set down.

2. The Contest is open to all Australian Amateurs, but only members of the W.I.A. are eligible for the awards.

3. The Contest is an open event—c.w., phone, or a combination of both, may be used.

4. The Contest is an Interstate Contest, and Amateurs in each State will endeavour to contact Amateurs in all other States.

5. A station may be operated by more than one operator provided that a separate log is entered for each operator under his own call sign.

6. All existing Amateur Bands may be used, and all transmissions must conform with the Regulations as laid down in the P.M.G.'s "Handbook For The Guidance Of Operators Of Amateur Wireless Stations." Any breaches of these will lead to the disqualification of the operator concerned.

7. The arrangements of schedules for contacts on other bands will not be permitted.

8. All stations entering the Contest will call "CQ RD" if using c.w., and "CQ Remembrance Day" if using phone.

9. A State competing for the Trophy must submit a minimum of six (6) logs from financial members before becoming eligible for contesting the Trophy.

10. Only one contact per station per band is permitted.

11. Serial numbers to be exchanged during the Contest will be as follows—

(a) For c.w. the first three figures will be the RST (telephony) report, followed by the serial number of the contact commencing with any number between 001 and 100 for the first contact and increasing in value by one (1) for each successive contact. If any contestant reaches 999 he will then commence 001 and continue 002, 003, 004, etc.

(b) For phone the first two figures will be the RS (telephony) report, followed by the serial number of the contact commencing with any number between 001 and 100 for the first contact and increasing in value by one (1) for each successive contact. If any contestant reaches 999, he will then commence 001 and continue 002, 003, 004, etc.

A complete exchange of serial numbers must take place before any points may be claimed for the contact.

SCORING

12. In order that an equitable distribution of points for States with a large number of contestants compared to a State with fewer contestants may be determined, a sliding scale of points has been allotted as shown in the scoring table appended.

13. In addition to the points in the scoring table that may be scored by a contestant, a bonus of 25 points may be added to the total score for each State worked on 50 Mc. or above.

LOGS

14. The log submitted must show in the following order—Date, time, band, emission, incoming signal's call sign and RST/No., my RST/No., time of QSO, points claimed. No log will be accepted unless laid out in this order!

15. A statement signed by the operator must be attached at the conclusion of the log stating that the Regulations (Rule 6) and these rules have been observed. Any logs departing from this form will automatically be disqualified.

16. All logs must be forwarded through the Contestant's Divisional Council (for membership checking) to reach the Federal Contest Committee, Box 1734, G.P.O., Sydney, on or before 4th September, 1951.

AWARDS

17. Attractive certificates will be awarded to the first, second and third highest in each State;

there will be no outright winner for Australia. Where a large number of logs are received, from any one State further certificates may be awarded at the discretion of the Contest Committee.

TROPHY

18. The State to which the Perpetual Trophy will be awarded shall be determined as follows: To the average of the top six (6) logs shall be added a bonus arrived at by multiplying this average by the ratio of valid logs submitted by that State to the total of Amateur Licensees in the Division at the time of the Contest.

Example, Total points equals—
Average Score $\left(\frac{\text{Number of Logs}}{1 \text{ plus Number of licensees in Division}} \right)$

19. The logs which will be accepted for the multiplier under Rule 18 shall show at least five (5) contacts in the Contest.

20. The Trophy shall be forwarded to the winning State in its container and will be held by that State for a period of twelve (12) months when the winner for the succeeding year is determined.

21. The Federal Contest Committee shall be the sole adjudicators, and their ruling will be binding in the case of any dispute.

SCORING TABLE

	To								
	VK2	VK3	VK4	VK5	VK6	VK7	VK9	Total	
VK2	—	1	2	3	5	4	6	21	
VK3	1	—	3	2	5	4	6	21	
VK4	2	3	—	3	5	4	6	21	
VK5	3	2	3	—	5	4	6	21	
VK6	5	5	5	5	—	5	6	21	
VK7	4	4	4	4	5	—	6	21	
VK9	6	6	6	6	6	6	—	21	

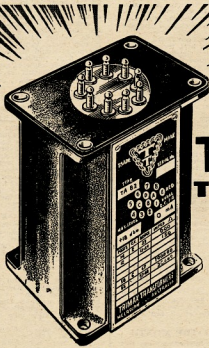
NOTE—Read the table from left to right for points for the various States.

Examples—
A VK2 scores 1 point for a VK3 contact.

A VK5 scores 3 " " " VK4 " "

A VK5 scores 2 " " " VK2 " "

4 " " " VK4 " "



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	John Martin Pty. Ltd.		Radio Elec. Wholesalers Ltd.	Atkins (W.A.) Ltd.
				Carlyle & Co. Ltd.

FEDERAL, QSL, and DIVISIONAL NOTES

Federal President: G. GLOVER (VK3AG); Federal Secretary: G. M. HULL (VK3ZS); Box 2811W, G.P.O., Melbourne.

NEW SOUTH WALES

President: J. Corbin, VK3YC.
Secretary: David H. Duff (VK2EO), Box 1734 G.P.O., Sydney.

Meeting Night: Fourth Friday of each month at Science House, Corner Gloucester and Essex Sts., Sydney.

Divisional Sub-Editor: Don B. Knock, VK3NO, 43 Yankoo Ave., Waverley, Sydney.

Zone Correspondents: North Coast and Tablelands: J. M. Reballick, VK2XO, Raleigh; Newcastle and Wharfedale: VK2AA, Vale; Birmingham Gardens, Newcastle: G. Fields & L. A. Hawkins, VK2YL, 27 Comfort Ave., Cessnock; Western: W. H. Slitt, VK3WH, Cumberland; South Coast and Sea: R. H. Rayner, VK2DO, 42 Pettit St., Yass; Western Suburbs: A. C. Pearce, VK3AHB, 121A Bulmain Rd., Leichhardt; Eastern Suburbs: D. B. Knock, VK2NO, 43 Yankoo Ave., Waverley; North Sydney: L. D. Cuffe, VK3AM, 79 Military Rd., Mosman; St. George: A. A. Ackerman, VK2ALG, 32 Park Rd., Carlton; South Sydney: V. H. Wilson, VK2VW, Cr. Wilton St. and Marine Pde., Maroubra.

VICTORIA

President: G. S. C. Semmens, VK3GS.
Secretary: C. Edwards, VK3JG, 19 Collington Ave., Brighton (XA 6326).

Administrative Secretary: Mrs. S. May, Law Court Chambers, 19 Queen St., Melbourne.
Meeting Night: First Wednesday of each month at the Radio School, Melb. Technical College. Zone Correspondents: Western: C. C. Waring, VK3YV, 15 St. Albans Rd., St. Albans; Western: K. R. Rose, VK3AKR, Killgill, Wimmera; North Eastern: T. K. Tennant, c/o Victory Theatre, Tatura; Far North West: M. Folie, VK3Z, 151 Rd., Milmura; Eastern: H. O. Kellas, VK3AEK, Timbarra; North Western: C. Case, VK3ACE, Cumminn Ave., Birchip.

FEDERAL

WHISPERS!

Whispers are funny things; they are a form of communication that move around very silently and are reflected off more ears than our radio waves are reflected off layers of ionised atmosphere. Sometimes they do you reach any specific point—other times they reach a point where they can utilise themselves to reflect off more ears than the beam of a searchlight. In the course of traversing their divergent paths become somewhat distorted.

This might all sound most peculiar, but it's a fact nevertheless, the point being that Federal Executive has received one or two of these divergent whispers. Having been received, they are disseminated and the audio component has been reproduced. And do you know what it said?

It said broadly, that the members of Federal Executive were an odd bunch of people—recluses from some ethereal world of their own not known to earthly people. Have you ever heard the like?

But it made us ponder just the same. Perhaps we have been too engrossed in the affairs of the Institute to notice that we were gradually becoming shrouded in the mists of officialdom! Or perhaps it has been suggested that, being Federal Executive, we should not speak with the earthly people who have even been thought of as anybody but Amateurs! What a funny world.

Gentlemen, let us state right here and now, that, far from being mortals from some far removed world, we are completely good old Australian flesh and blood—at least we claim so since we were mostly born and bred here. And let us hasten to add, most of us are even active Amateurs like yourselves, bitten with the same bug, coming up against the same technical problems, having the same fun and experience getting rid of them. Yes sir! We're normal earthly beings alright.

Admitted we do advertise ourselves over the air, so you can say we are secretive to that extent. But should we have to? Our names and call signs are already printed in the magazine scores of times; they're even in the call sign book with the correct address, believe it or not! Can you imagine how many times you must have read about it, being Federal, to read about us and our doings? Do you know that most of us can even find time to attend our Headquarters' Divisional meetings—just to sort of take an interest in what's going on down there?

WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK3WI: Sundays, 1100 hours EST, 7195 Kc. and 2000 hours EST 50 and 100 Mc. V. frequency checks available from VK3WI. Intra-State working frequency, 7175 Kc.

VK3WI: Sundays, 1130 hours EST, simultaneous on 3598 and 7196 Kc. and re-broadcast on 50 and 144 Mc. bands. Intra-State working frequency 7185 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

VK3WI: Sundays, 0900 hours EST, simultaneously on 3750 Kc., 7196 Kc., 14342 Kc., 32.4 Mc. and 144.138 Mc. Frequency checks are given two nights weekly, and the times are announced during Sunday broadcasts. 7065 Kc. channel is used from 1000 to 1030 hours each Sunday as VK3WI service to VK4WI.

VK3WI: Sundays, 1000 hours SAST, on 7196 Kc. Frequency checks are given by VK3WDW by arrangements only on the 7 and 14 Mc. bands.

VK3WI: Sundays, 0930 hours WAST, on 7196 Kc. No frequency checks available.

VK3WI: Sundays, at 1000 hours EST, on 7196 Kc. No frequency checks are available.

But say, we hear all sorts of rumours that some of you Interstate boys periodically visit our picturesque metropolis! It's a lovely city you know—beautiful multi-element stacked arrays, great steel towers gracing the skyline even into the country areas, long wave shaped wire arrays and elegant masts. We might appear fools to the multitude, but we can still appreciate a pretty picture.

Joking aside, though, why not make our acquaintance some time boys? Surely you can't say that the blame is all on our side! If you do, then we must hasten to assure you that our shack doors—and our front doors—are open any time to newcomers and old-timers alike. You won't find us half the ethereal recluses that the whisper waves have distorted us into—in fact you'll find us just plain everyday Australian type of people ready to receive you with a firm handshake and the true Amateur-like hospitality. If you don't believe us look us up some time—

George Glover, VK3AG, 54 Watt Street, Canterbury Hill (WX 3449).
Max Hull, VK3ZS, 22 Dryden Street, Box 197 (WF 7097).

George Manning, VK3XJ, 59 Type Street, Richmond (JA 3304).

Bill Grenow, VK3WJ, 2 Anthony Street, Glen Iris (VF 4821).

Gordon Weynton, VK3XU, c/o Castlemaine Woollen Mills, Castlemaine.

Pere Evans, VK3OZ, 5 Howitt Street, Glen Iris (WA 4229).

Oh! And before we forget, we talk your language too! Yep! Whispers sure are funny things, but you can phase them off if you try.

THOSE CERTIFICATES

Due to a proponderance of administration to attend to these last few months, it has been a difficult task to check the 1961 National Field Day logs. However, these are all but completed

W.I.A. ACTIVITIES CALENDAR

July 8: R.S.G.B. Two Metre Field Day Contest.

August 11-12: Remembrance Day Contest.

October 15-18: VK-ZL Jubilee Contest (C.W. Section).

October 28-31: VK-ZL Jubilee Contest (Phone Section).

QUEENSLAND

President: J. H. Farrell, VK4WJ.

Secretary: J. F. Pickles, VK4FP, Box 638J, G.P.O., Brisbane.

Meeting Night: Third Friday in each month at the I.R.E. Rooms, Wickham St., Valley.

Divisional Sub-Editor: Clive J. Cooke, VK4CC, Kuram Street, Chermide, Brisbane.

SOUTH AUSTRALIA

President: E. A. Barber, VK5MD.

Secretary: G. M. Bowen, VK5XU, Box 1234K, G.P.O., Adelaide.

Meeting Night: Second Tuesday of each month at 17 Waymouth St., Adelaide.

Divisional Sub-Editor: W. W. Parsons, VK5PS, 10 Victoria Avenue, Rose Park.

WESTERN AUSTRALIA

President: J. Campbell-Watson, VK4JW.

Secretary: H. B. Lang, Box N102, G.P.O., Perth, W.A.

Meeting Place: Padbury House, Cr. St. George's Ter. and King St., Perth.

Meeting Night: Third Tuesday of each month. Divisional Sub-Editor: Alec A. Smith, VK6AS, 73 Weston St., Carlisle, Western Australia.

TASMANIA

President: J. Brown, VK3TB.

Secretary: R. D. O'May, VK3OM, Box 371B G.P.O., Hobart.

Meeting Night: First Wednesday of each month at the Photographic Society's Rooms, 163 Liverpool St., Hobart.

Divisional Sub-Editor: S. Excell, VK7SJ, 77 Mollie St., Hobart, Tasmania.

North Zone Correspondent: C. A. Cullinan, VK3XW, 12 Montrose Place, Launceston.

and will be published in the August issue of "Amateur Radio."

It is also requested that patience be the virtue of those who have been successful in gaining places in the V.H.F. Ross A. Hull Memorial Contest and are awaiting the issuance of certificates. Since great emphasis has been placed on this Contest, Federal Executive desire that the certificate be of a higher standard. There being no certificate in existence at the time of the Contest, it was unanimously agreed that now was the time to commence a programme of "certificate improvement." Unfortunately, the times dictate a slow delivery on anything in the sphere of printing and hence the request for patience. It is thought that the reward will be worth waiting for.

Federal Executive are holding a sizeable stock of certificates awarded for various achievements, but plans have already been implemented to gradually replace these with a certificate of higher standard as the stocks become exhausted.

GOVERNMENT GRANT OF £250 FOR

1951 VK-ZL CONTEST

Confirmation has been received with relation to a Government grant of £250 to be spent on the 1951 VK-ZL Contest to celebrate Jubilee year. The rules of the Contest will be published in the August issue of the magazine under the heading "The 1951 VK-ZL Jubilee International DX Contest." Complete details of the Contest, together with the prizes, advertising and other awards are at present being worked out by the Federal Contest Committee who have been co-opted from the New South Wales Division for the following year under the terms of the Contest.

The boys in New South Wales are really moving on this Contest and we can assure you feeling that it will be well worth entering for this year. The success of this year's Contest is important for two reasons, firstly, and most important, the advantage of having Government support for a Jubilee Contest to celebrate Jubilee, and secondly, this is the first time under existing administration that Federal Executive have been asked to submit a Committee of the Headquarters' Division. So give them all the support they rightly deserve fellows, and so our vote! We make this year's Contest an outstanding success.

The W.I.A. are proud of the fact that this contest has been made available to them and thank you due to the fact that the Divisional Council who were responsible for obtaining it.

ZLs ON 40 METRE PHONE

Although neither the Postmaster-General's Department nor Federal Executive have been officially notified of the fact at the time of going to press that the ZLs are now licensed to operate phone on the 40 metre band, it is fairly evident, from reports heard on the air, that they have been granted this privilege within the gentlemen's agreement band and including 7050 to 7200 Kc. This should prove a major event in encouraging greater population of this band.

REMEMBRANCE DAY CONTEST

The Remembrance Day Contest commences on 11th August and it is hoped to have a bigger and better participation this year. The Convention agreed to a change in scoring procedure with a view to encouraging the larger States, so F.E. does ask you all to "be in it" and make it another outstanding success for the year. Remember the thought behind it—*Let Us Forget.*

NEW COUNTRY

854 Saarland is now recognised as a separate country and can be added to your DX lists.

F.E.A.R.L. NEWS

The news bulletin of the Far East Amateur Radio League has been received by Federal Executive, together with the details and samples of two certificates available for DX proficiency. For VK stations to earn the awards, seven out of a possible nine J.A. districts are necessary for the W.A.J.A.D. (Worked All Japanese Amateur Districts) award, and any five J.A. stations are necessary for the W.F.J.S. (Worked Five Japan Stations) award. Any members desiring to claim these awards must forward the necessary cards to the QSL Manager, JAGHB, W. H. Cummins, QSL Bureau, F.E.A.R.L., A.P.O. 500, San Francisco, California.

SILENT KEY

It is with deep regret that we record the passing of:—

VK2UF—Frank Tarrant, of Cooks Hill, Newcastle, N.S.W.

VK3UR—Via. Smith, 550 Wellington Street, Collingwood, Vic.

ACCURATE FREQUENCY TRANSMISSION RESULTS

The following is the official results of the Accurate Frequency Transmission from VK3WI on 24th May on the 3.5 Mc. band.

Frequency	Error
Kilocycles	Cycles
3530	+40
3560	—10
3590	+35
3620	+30
3650	—10
3680	+20
3710	+60
3740	—10
3770	+60
3800	+20

NEW SOUTH WALES

EAST SYDNEY AND SOUTHERN SUBURBS

Walking along the road I blew into that grizzled old timer, Malcolm Perry, of early day Waverley Club fame—one of the pioneers. Mal is no longer active in the world of Amateur Radio, but takes a keen interest nevertheless in what the young fellas are doing.

Members of Waverley Club, 2BV, have been heard making cross-band tests with 2AFZ on 2 metres; not apparently, with much success.

Andy 2AX had an unusual accident; doing a job in his daily toil, Andy nearly dropped a Hallcrafters Rx and in saving that from damage, cut his head rather badly. 2ABD figured recently in the reception of distress signals from a disabled 300 ton motor vessel off the North Eastern Coast. He is using a presently-popular system of n.b.f.m. and many of the gang are sitting up and taking notice of it. A new station in the Bondi area is Joe Howie, active on 40 and 20 phone with the call sign 2AYH.

Transmission was tested one night at 2NO's location when Cec Cronin, of w.h.f. fame, brought along his splendidly engineered 580 Mc. outfit. Although the only station worked was 2WJ, four miles distant, signals were S9 plus. 2NO would like to find the time to get going

on the band and is hoping. Ivan 2TN is heard at intervals on 40 phone with a good transmission, but you need to keep back from that mike a bit OM, otherwise the granules seem to "eat a bit." 2ASE is very proud of his "rogues gallery," a collection of photos and cards of Amateurs who have visited him.

Alf 2CE is braving the b.c.'s on 40 phone, but there are many other who use the band "in-between serials." He has a natty little 144 Mc. Tx-Rx in his car, using a 6C4-12AB combination powered from the vibrator supply which delivers h.t. for the car's broadcast Rx. Wal 2SA told his harmonic that a pile of old magazines could be got rid of. Which would have been OK excepting that QST's back to 1926 went into the bonfire; sheer sacrilege says this scribbler. A trio of OT's heard in Sunday morning confab on 40 were VK's: 2SA, 2RF and 2NO; comparing notes on "them was the days." Visitors to the scribble's station have been Bob 2ST and Chas 2CL.

2NO is using successfully on 40 and 80 a phase modulation scheme described originally in "QST" for January, 1947, and in 1948 in the American "Radio and Television News," by WEBET. It really works well as 2ABD demonstrated firstly, and minimises b.c.'s very considerably. In company with 2CM, 2NO has been holidaying in the north west of the State with Ray 2HC. Heard on 20 metre phone was Bill 2BC, that ardent brass pounder. Yes, it's true, but not from his own station, he was giving a helping hand to newcomer 2AYH, Joe Howie.

Tony 2IH heard with excellent transmission, believe he has taken on a new hobby—sailing boats. Phil 2PR puts out a nice signal on 40 phone. 2AGA has just about got settled down in his new QTH at Sylvania and will operate his rig in the garage by remote control. He is a real Ham, for that is his name—Tom Ham.

Pleased with his 40 metre soldier's dixie midget, Ray 2AIG has nearly completed another midget for 20 metres. The 813 and the tank coil on the top of the lid certainly looks very business-like. Ron 2VX will be moving into a new QTH very soon. Ted 2AHQ had a look at his rig the other day and threatened he would be up at the again very soon. On the evening of 26th May, a miniature hamfest was held at 2AX's, and those present were 2AX, 2ARR, 2RF, 2CE, 2CF, 2MB, 2ALB, 2ASE, 2WF and 2NO. The "spread" prepared so ably by Andy's 2YL, Kay, was something to be remembered and highlights of the evening were provided by the indefatigable and ever-ready, armed with his never-to-be-forgotten wire recorder.

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Valves, new, boxed, RCA 834s, £1/8/- each.

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BRIGHT STAR RADIO

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sent his Ham gear to Melbourne which will be his new QTH.

3VA operating new p.p. 807s rig on 40; also heard on 20. 3GR QSOed FKAC on 40 phone. 3RU and 3GR away on a holiday tour and visited Hams in Birchcra, Bertwillow, Swan Hill, Shepparton, Benalla and Wangaratta. 3CE at Bertwillow has a 80 foot lattice mast and Roy is keen to get the cobwebs out of the rig and get back into the battle again. 3BI heard having lots of fun on 80 metres. 3DS and 3AB1 not on at present, too QRL with business. 3HW not on lately.

3ME is in his new home and is pushing out quite a nice signal on 40 and 20; new QTH is close to 3HW, so plenty QRM I guess. Bill 3AMH, our Secretary, away in VK2 on holidays. Conditions on 40 and 20 very patchy. Some DX available to the very patient ones. A good QSO is available to anyone contacting a Dulce boat, the operator using a special permit call of POABZ on 20; Jan uses 3S watts and is putting in quite a good signal to VK. This zone hands out a welcome to Cedric 3QG who is now a resident of Ballarat; rig is a Type 3. Another new call sign in Ballarat is 3BL, has not been heard as yet, what about it OM. 3ASY and 3ALM seen replacing huge divots out Buninyong way on a recent morning. 3BE not heard very often. YL trouble we think. 3SE on occasionally using phone and c.w. 5CH met in Ballarat recently, was seen peering into a cafe window looking very hungry and was soon put on the right beam by 3GR. Thanks to all who made the trip to Ballarat and made the S.W. Zone Convention such a success.

3BU has been on 2 metres, Melbourne boys coming in rather well on 2 on his Rx. Bill has re-built his wire recorder and playing some of the boys' transmissions back to them. 3WT still gets on when he is not on his motor bike. The Geelong gang at last managed to get in the May S.W. Zone hook-up, hi. 3ABK has a transceiver going on 2, has a 3 element beam for that band. 3ABE also has a beam and 322 for 144 Mc. 3AKE has a new Rx for 144. 3ALG not so active during May. 3IC gets on for the Geelong hook-up of a Thursday night. 3AJF getting on a bit more often now the yacht is finished. 3AOL has a new final going. 3CM, 3AES, 3AB, 3AL, 3SY and 3SW have been silent for some time.

CENTRAL WESTERN ZONE

A new call in these notes is 3AIM of Newcastle, Bob at present is running about 15 watts

input to a single 807, but has plans in hand to go QRO to 90 watts with a pair of 807s, modulated by another pair of 807s. When it is complete it should be a very nice example of the standard type of Amateur Tx. 3DP is also going QRO, is anxious as to the effect of the 1,000 volt motor-generator on the 807s. More work has been put into his new Rx finishing up with 50 Kc. i.f.s. Jin is having some trouble with the 144 Mc. "Leno"; plenty of juice goes in, but nothing goes out.

During the last zone hook-up 3AKW mentioned a secret Tx, it turned out to be a 144 Mc. oscillator using linear tank circuits, at present it is operating on 146 Mc. and only requires an antenna to get into business. 3FA has his xtal convertes going on 144 Mc., but how much DX (if any) Byron has heard to date we don't know. 3XC when last heard was busy experimenting with a Franklin oscillator. 3YW has completely revamped the n.b.f.m. Tx into an antenna tuning unit case. With a Rx in the bottom of the case, a portable outfit is available—the Tx is handswitched.

3EP paid his annual visit to Stawell with the local leather-bashers; Bert QRL with work. When the new house is finished, Bert should have more time.

The zone convention to be held at Ararat on Sunday, 16th September, promises to live up to its usual high standard (no kidding) and for the main event—the Tx Hunt on 3.5 Mc.—a worth while prize is available, so polish up your d. ideas and make a good contest of it. I would sure hate to see the prize go to the experts of the other zones, but that is up to you entirely. We would suggest you look at the d.f. Rx and decide if you could carry it or if it would have to stay in the car; the difference may have quite a bearing on the result. Transmission quite likely will be on c.w., as voice operation could easily give the position away. For those interested in v.h.f. and who could arrange skeds, the hills surrounding Ararat offer good DX possibilities. Further details will be finalised over the zone hook-up, on 8th July at 10 a.m. on 7155 Kc. (approx.). See you then.

EASTERN ZONE

As I have missed out on a couple of zone nets this month, someone isn't getting his name in these notes. Anyway, if I asked every Ham in the zone what he had been doing, the answer would be "nothing"! 3ALA had his second win in the portable contest, with 3RH and 3QZ

filling the other places; nice work! 3ADA has been posted to VK5, and is with a R.A.A.F. supply unit in the centre. 3PR is to move to a new house soon, I heard him say so one day on 40. 3AKP was in Sale for some weeks on relief duty at a financial institution. 3QZ checking up on power quotas!

3ES has his new shop open and his junior op, David, has left school and is swinging a relief duty at a financial institution. 3QZ checking up on power quotas! Keith recently paid a very hurried visit to 3PR and, being a Sunday, he was looking forward to a slice of the famous cream sponge. He was out of luck! Mrs. 3PR had manufactured the salubrious article and set it aside for the cream, etc., to set. Ron's dog, a very intelligent animal and obviously accustomed to the better things of life, sneaked in and scooped the lot!

3VL/US not heard lately—said to be changing houses and working portable on 6. 3EB, another missing friend, still hasn't fixed the feeders. The May meeting of the Sale Sub-Branch was very interesting—3QZ's lecture on Radar and the C.R.O., being one of the best yet. They were a well behaved lot, and didn't pinch anything from me either. Apologies to the chaps I haven't mentioned and see you anon!

GEELONG AMATEUR RADIO CLUB

At the first meeting of the month Brian 3AOL gave a very interesting lecture on transformer winding, including power trannies and modulation transformers. From time to time he was asked questions which he readily answered.

Over 200 attended the Exhibition (24th May) which was rather encouraging. Three trestle tables were laid out the length of the hall on which over 30 pieces of equipment were displayed. Outstanding exhibits were a complete station of good workmanship by 3ATV.

3ABK had his motor bike fitted up with portable Tx and Rx including d.f. loop to show how he goes out on a field day, he also had a transceiver for 2 metres. 3BU had his wire recorder with which he had spent hours in building, with rather pleasing results and those present had their voices put on the wire and played back to them. 3ABE had a 2 metre Tx and Rx and a 3 element close-spaced beam. 3AKE and 3BW had v.h.f. gear.

A display of measuring equipment was given by a representative of the S.E.C. Other equipment included crystal sets and many pieces of disposal equipment which had been converted for Amateur use. XYLs and YLs were busy and helped with the supper, 80 persons

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washing machine in pieces, and several other articles in the process of being painted duck egg blue or what the painter calls "egg white". I am sure that one painting these certain articles (it's alright Laurie, you can trust me not to give away your secret: oyster Parson they call me), anyway if a washing machine is seen tearing down the street of Berri at about sixty miles an hour going honk honk, you can take it for granted that somebody's been making a little bit of a mess.

K. Duff (31Q) passed through Adelaide enroute for Darwin this month, and as he was mobile he had quite a few contacts with the local boys. Believe that he was parked at a local caravan park for a few days, but did not get the chance to meet him.

Wyck SWM is back from a vacation at Melbourne and brings news of several of the boys. Gourd to know that Charlie 3BH is still in the pink, and that the XVI on the way to the recovery OM. Jack 3WR seemed to figure a lot in Wyck's tales, and incidentally Jack, that bed in the control room and the milkman and baker calling seems to have impressed him more than anything else. I have found him curled up behind the power cabinet several times lately so please don't tell him any of the inner workings again OM as he takes it too literally. Believe it or not, when I kicked him back to consciousness last night he said "A.R." two points please, and make it a square loaf."

Heard a VK5 station and a VK3 station both call a French station the other day. The French station was heard to be making a very good fair report, and then crossed to the VK3 leaving the VK3 standing by. The VK3 called in the general of a mates to work the F station and made it a six-way contact with the VK3 still standing by. A splendid time was had by all. The VK3 still standing by, and as I know the VK3 is still standing by. Wouldn't it!

.....

WESTERN AUSTRALIA

Firstly I must apologise for the absence of notes for the last issue of "A.R." It so happened that I was away in the country on holidays, and although I made arrangements for the notes to be submitted, these arrangements must have fallen down. The next meeting was held in Padbury House on the 15th, with 6JW in the chair and another good roll-up of members. The meeting was held in the same room as the holidays from the magnetic observatory at Watheroo. A new member in 6UF was elected and the 6JW was elected to the position of President. 6JW and 6JL were elected to the Contest Committee, but another nomination is required. It was considered that three members would suffice for the Committee. A good deal of discussion took place on the proposed unified constitution and our own Divisional one, but as this has not yet been decided, it was decided to leave it to members and over 6WL it need not be repeated here.

Two very excellent lectures were delivered, one by Mr. J. B. Calbraith on "The Super-Selective Receiver," by 6SA, and "Rotary Beams - Their Design and Adjustment," by 6MK. I think that both Jim and Tom could be considered authorities on their respective subjects, and both lectures were received with considerable enthusiasm by the meeting. A précis of each of the lectures was distributed to each member, and I understand these précis are being very well received, especially by country members.

A parcel of surplus radio gear from a city store was baited for and I think every member present at the meeting received something to carry off home. Even if it was only a small wave coil or two. The meeting broke up about 11 p.m.

PERSONALITIES

6BO has been heard on ten metres lately, but hasn't deserted 6 by any means. Rollo is looking forward to the possibility of sporadic contacts in the shortest of time. He has recently returned from the north west are 6IWW and 6DJ. Both spent an enjoyable six weeks installing radio gear, fishing and sunbaking. 6IWW was out on the water for a while, and the "new car owners brigade" and are consequently finding less time for radio. 6PJ still seems to be on the air, but only on the 10m band.

6LG down in Albany continues to pour a relentless signal into Perth on 40. 6GA down from Forrest for just over a week. Bill Mansfield is down in the south coast for the short time at his disposal. See you in August OM. A new member in 6BR is preparing for 40 metre c.w. activity with a Command TC. 6JW heard on 10m with QRG 16.6 (six times) and 16.7.

Congratulations to 6DW for first placing for the State in the Ross Hill Memorial V.H.F. Contest; nice work Don. 6WM, of Kalgoorlie, heard you out on 40 with a nice signal. Sorry I didn't get around to seeing you whilst up there recently Bill. 6DX getting ready to give something up on 40m band. 6JL is still on the n.b.f.m. Also has the material for a new three

element beam on 20, so it looks like a busy time ahead of Bill.

With the issue of "A.R." yours truly comes to be the Sub-Editor for VK6. However, before closing down, I would like to thank 6WZ, 6WT and 6GA for supplying the material for the columns. Also 6WZ and 6JW for broadcasting the 6W1 news bulletin for me on the few occasions that I was unable to do so. Thanks also to 6JL for putting up with me for so long. Cheerio.

TASMANIA

Our June meeting was surprisingly well attended, possibly due to the fact that a quantity of very cheap radio gear was available, and was welcome by all those present. A lecture was given by TOM on "Book Binding" (not "findings" as some members thought of copies of "Amateur Radio" into book form. Sounds easy the way Bob described the necessities required, so no future thought should be given by members cannot have easy access to articles published in "A.R."

Heard working cross band one recent Sunday was Ted and Len on 40 with an f.b. signal, incidentally, Len broadcasts the W.I.A. news simultaneously on 7 and 14 Mc. Future broadcasts will be on 3.5 and 7 Mc. Ted's permission to be on single side band for the benefit of Northern members. 7EJ and 7SA active on 7 Mc. Bay. Gellieve. Ted has a lot of trouble with several orchards being in the way of his DX long wire antenna. Ted will soon be running high power.

Congratulations must be extended to 7AJ for his fine work with a home constructed tape recorder. A demonstration to several members proved that they do look good, but performs equally as well. May we suggest Athol you record the 10 o'clock news of a Sunday and say, if all are agreeable, re-appear it early on the Tuesday. This benefit members who are unable to get out of bed in time for the morning broadcast. (Who said I only look after myself.)

Owing to unforeseen circumstances 7JB will now be with us a little longer and is looking forward to the 10 o'clock news. 7JB is a bit spicuous by his absence has been TBH who is reputed to be concentrating on 50 Mc. Another member to migrate to this band is 7G, converted 7LHA to 7G. Momentarily 7G was 72nd June, when the new beam was finally erected. 7BM, after wrestling with the 640, 7G and 7BM, has been heard on 7G, 7G channel; still want to sell it Rupe? Seen driving the latest addition to his large fleet of cars and trucks, and was heard on 7G, 7G active late. Max now has assumed the life of a blasted plutocrat, suggest a "Rolls" next.

Welcome must be extended to a new member who has just joined the club, in 7G, 7G is Ellis Walker of Burnie, who will be a welcome addition to the North West Division. Pleading to note solid signals from 7AB and 7BQ. Len we believe will shortly be leaving for England and we trust his travels will be enjoyed. 7SD still remains an ardent c.w. man, unfortunately Don had to make a big decision lately, either dispose of his radio gear or do without a new cupboard in his room; needless to say he chose the former. 7DA now an adapt photographer, found plenty of time to pursue his activities whilst waiting nearly a day for a brand new wagon to be delivered his way to Swansea. 7LD retired from radio, apparently, as no signals have been heard for quite a while now. Len.

Apologies to those chaps not mentioned, owing to shortage of available space, notes often are condensed, so cheers for the present.

NORTHERN ZONE

Welcome to TGM who made his first appearance on 40 with f.b. sounder phone. However Gordon is investigating the possibilities of a better antenna as his location is a difficult one. Congratulations go out to 7LZ who won the Tasmanian Section of the Ross Hill Memorial Contest. Col has recently returned from holidays and is looking forward to more DX. 7BY Len we believe will shortly be leaving for England and we trust his travels will be enjoyed. 7SD still remains an ardent c.w. man, unfortunately Don had to make a big decision lately, either dispose of his radio gear or do without a new cupboard in his room; needless to say he chose the former. 7DA now an adapt photographer, found plenty of time to pursue his activities whilst waiting nearly a day for a brand new wagon to be delivered his way to Swansea. 7LD retired from radio, apparently, as no signals have been heard for quite a while now. Len.

Apologies to those chaps not mentioned, owing to shortage of available space, notes often are condensed, so cheers for the present.

some gear for TMC—then a brief trip to Hobart. The shack at TMC has been a hive of activity. 7B is now working on a final for 144 Mc. (100 watts) and is also investigating the possibility of suppressor modulation for a portable 40 metre rig. Haven't heard much from 7BK, but guess Ray has his ear glued to the DX. 7BES still has the gear packed away, but did manage to finish off his super-duper 400 watt amplifier. This was demonstrated to Northern Zone gang with exceptionally good results. Remember chaps, the zone meeting is on the second Friday of each month and there is always something interesting, so roll up.

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SELL—First-class 3 element 10 metre beam. Includes rotating mast, motor drive, remote direction indicator, all necessary hardware to attach to house wall or pole, etc. Ayre, 65 Kenmare St., Box Hill, E.12, Vic. (WX 4767)

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Primary Connections For Modulator Tubes				Secondary Connections and Impedances for R.F. Load												
A to A Impedance	Audio Tubes	CT	A	Join 9 & 10 Con. to 7 & 12	Join 9 & 10 Con. to 8 & 12	Join 9 & 10 Con. to 8 & 11	Join 8 & 9 Con. to 7 & 12	Join 10 & 12 Con. to 7 & 10	Join 10 & 11 Con. to 8 & 10	Join 3 & 4 Con. to 1 & 6	Join 3 & 4 Con. to 2 & 6	Join 2 & 3 Con. to 1 & 6	Join 3 & 4 Con. to 2 & 5	Join 1 & 3 4 & 6 Con. to 1 & 4	Join 7 & 11 8 & 12 Con. to 7 & 8	Join 1 & 5 2 & 6 Con. to 1 & 2
Ohms																
2000	2	3—4	5	8600	6350	4300	3620	2150	1070	—	—	—	—	—	—	200
2000	1	2—5	6	15700	11400	7900	6650	3920	1950	—	—	—	—	—	—	350
3000	2	3—4	5	13000	9400	6500	5500	3240	1620	—	—	—	—	—	—	300
3000	1	2—5	6	23500	17000	11800	10000	5900	2950	—	—	—	—	—	—	520
3800	2	3—4	5	16400	12000	8200	7000	4100	2050	—	—	—	—	—	—	380
3800	1	2—5	6	29800	21500	15000	12600	7500	3740	—	—	—	—	—	—	660
4000	2	3—4	5	17400	12500	8650	7300	4300	2160	—	—	—	—	—	—	400
4000	8	9—10	11	—	—	—	—	—	—	5500	3450	2850	1850	1380	—	250
5000	2	3—4	5	21600	15700	10800	9150	5400	2700	—	—	—	—	—	—	500
5000	8	9—10	11	—	—	—	—	—	—	7000	4300	3500	2300	1730	—	300
6000	1	3—4	6	8600	6350	4300	3620	2140	1070	—	—	—	—	—	—	200
6000	8	9—10	11	—	—	—	—	—	—	8300	5150	4250	2750	2180	—	370
6600	1	3—4	6	9500	7000	4750	4000	2350	1180	—	—	—	—	—	—	220
6600	8	9—10	11	—	—	—	—	—	—	9100	5650	4660	3000	2400	—	405
7000	1	3—4	6	10000	7300	5050	4280	2500	1250	—	—	—	—	—	—	230
7000	8	9—10	11	—	—	—	—	—	—	9700	6000	5000	3200	2400	—	430
8000	1	3—4	6	12000	8400	5800	4900	2900	1440	—	—	—	—	—	—	270
8000	8	9—10	11	—	—	—	—	—	—	11000	6900	5650	3700	2760	—	500
9000	1	3—4	6	13000	9400	6500	5500	3200	1620	—	—	—	—	—	—	300
9000	8	9—10	11	—	—	—	—	—	—	12500	7750	6300	4150	3100	—	550
9000	7	9—10	12	—	—	—	—	—	—	6200	3900	3200	2050	1550	—	275
10000	1	3—4	6	14400	10500	7200	6100	3600	1800	—	—	—	—	—	—	330
10000	8	9—10	11	—	—	—	—	—	—	14000	8600	7100	4600	3450	—	600
10000	7	9—10	12	—	—	—	—	—	—	6900	4300	3500	2300	1740	—	310
12000	1	3—4	6	17400	12500	8700	7250	4320	2150	—	—	—	—	—	—	400
12000	7	9—10	12	—	—	—	—	—	—	8300	5150	4250	2750	2070	—	370
14000	7	9—10	12	—	—	—	—	—	—	9700	6000	4900	3200	2440	—	430
16000	7	9—10	12	—	—	—	—	—	—	11000	6900	5600	3700	2789	—	500
18000	7	9—10	12	—	—	—	—	—	—	12500	7750	6300	4150	3140	—	550

List No.	Audio Watts	R.F. Input Watts	Max. Sec. Current	Overall Size	W.	H.	Weight lbs. ozs.	Nett Price Inc. Tax
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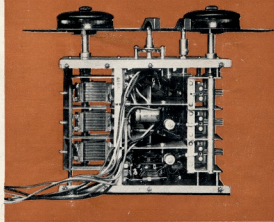
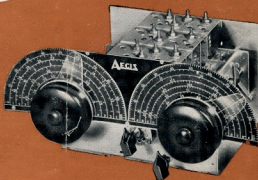
4 Wave Bands		Band-Spread—5 Bands	
590 Kc. — 1500 Kc.	3.5	4.0 Mc. 80 Metres	
1500 Kc. — 4 Mc.	6.9	7.3 Mc. 40 Metres	
4 Mc. — 11 Mc.	14.0	14.4 Mc. 20 Metres	
11 Mc. — 30 Mc.	20.5	22.0 Mc. 15 Metres	
	27.0	30.0 Mc. 10 Metres	

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